

Notice of Allowability

Application No.

10/626,911

Examiner

Robert A. Hopkins

Applicant(s)

AL-BABTAIN, IBRAHIM M.

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 7-25-03.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11-3-03, 3-21-05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

Claims 1-25 are allowed.

The following is an examiner's statement of reasons for allowance:

Claim 1 recites "wherein the portion of the offgas stream is taken from a feed stream for a first pressure swing adsorption unit". Reddy(6496016) and Rao et al(5507856) teaches a method of hydrogen recovery including forming a combined stream, the combined stream including at least a portion of a product stream from a steam reformer and at least a portion of an offgas stream from a refinery, passing at least a portion of the combined stream through a second pressure swing adsorption unit and recovering a high-purity hydrogen stream from the second pressure swing adsorption unit. However Reddy and Rao et al fails to teach wherein the portion of the offgas stream is taken from a feed stream for a first pressure swing adsorption unit. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide a portion of the offgas stream which is taken from a feed stream for a first pressure swing adsorption unit because neither Reddy nor Rao et al does not suggest such a modification. Claims 2-16 depend on claim 1 and hence are also allowed.

Claim 17 recites "wherein the portion of the first stream is taken from a feed stream for a first pressure swing adsorption unit, and wherein the portion of the second stream is taken from a feed stream for a second pressure swing adsorption unit". Reddy(6496016) and Rao et al(5507856) teach a first pressure swing adsorption unit,

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and a combined stream into the first pressure swing adsorption unit , but fails to teach a feed stream for a second pressure swing adsorption unit. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide a portion of the first stream which is taken from a feed stream for a first pressure swing adsorption unit, and wherein the portion of the second stream is taken from a feed stream for a second pressure swing adsorption unit because neither Reddy nor Rao et al does not suggest such a modification. Claims 18-25 depend on claim 17 and hence are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

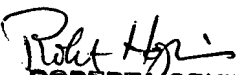
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Hopkins whose telephone number is 571-272-1159. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rah
January 24, 2007


ROBERT HOPKINS
PRIMARY EXAMINER
A.U. 1724